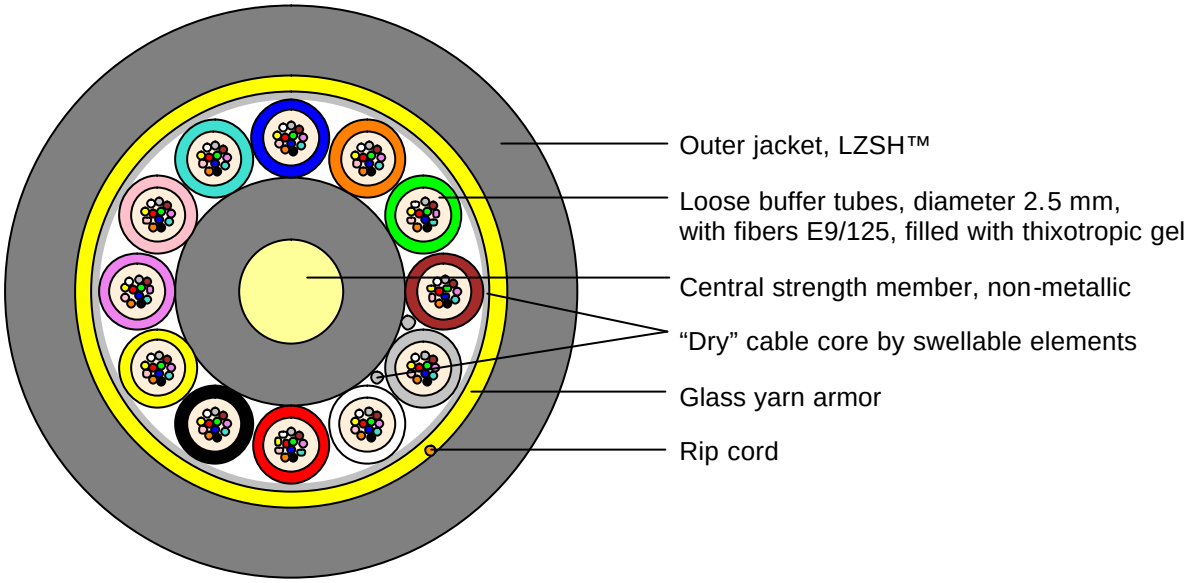
Evolant® Solutions

Data sheet

Flame-retardant indoor/outdoor cables

with 4 to 288 single-mode fibers E9/125 SMF-28e®; non-metallic, stranded loose tube design, glass yarn armor and LZSH™ jacket



Principle drawing
Example: A-DQ(BN)H 12x12 E9/125 0.36F3.5 + 0.22H18 LG

A-DQ(BN)H 4 to 288 E9/125 0.36F3.5 + 0.22H18 LG

Design and special properties

- Light, thin and robust multi-purpose cables (MPC)
- Corning’s MPC (multi-purpose cables) can be employed both indoors and outdoors for campus backbone and building backbone (riser) cabling as well as for the cabling between floor distributors
- The cables can be installed in conduits, ducts and be buried directly in the ground (microbe resistant)
- Minibundle (loose tube) design
- Single-layer stranded construction, S/Z stranding
- Dry cable core by swellable elements in the cable core, water blocking to IEC 60794-1-F5
- All-dielectric cable construction requires no grounding or bonding
- Enhanced rodent protection by laminated glass yarns
- Outer jacket LSZH™, UV resistant
- Low-smoke to IEC 61034 and zero-halogen (LSZH™)
- Flame-retardant to IEC 60332-1, non-corrosive to IEC 60754-2 (FRNC) and DIN VDE 0472 part 813
- The used Corning® single-mode fibers SMF-28e® are fully compliant to standard ITU-T G.652.D (reduced OH- peak) showing low attenuation throughout the 1285 nm to 1625 nm wavelength range
- Telcordia standard (Bellcore) for fiber and loose tube coloring
- Cable design according to Corning standard

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Color coding

Fibers:	blue, orange, green, brown, grey, white, red, black ,yellow ,violet, pink, turquoise
Loose tubes:	up to 12 tubes: blue, orange, green, brown, grey, white, red, black, yellow, violet, pink, turquoise more than 12 tubes: continuous sequence of Telcordia standard
Filling elements:	natural, if required to fill up the cable core
Outer jacket:	black
Cable printing:	<meter marking> <double sine> CORNING FutureLink/MPC <cable designation> Method: Hot-foil printing,

Characteristics of single-mode fibers E9/125 SMF-28e®

Optical and mechanical:

Mode field diameter at 1310 nm	[µm]	9.2 ± 0.4
Cladding diameter	[µm]	125.0 ± 0.7
Coating diameter	[µm]	245 ± 5
Attenuation at 1310 nm, typical	[dB/km]	≤ 0.36
Attenuation at 1550 nm, typical	[dB/km]	≤ 0.22
Attenuation at 1383 nm, typical	[dB/km]	≤ 0.36
Dispersion in the range 1285 to 1330 nm	[ps/(nm∗km)]	≤ 3.5
Dispersion at 1550 nm	[ps/(nm∗km)]	≤ 18
Cable cutoff wavelength (λ_{cc})	[nm]	≤ 1260

The fibers are fully in compliance with ITU-T G.652.D and annexes

Technical cable characteristics

Mechanical and environmental:

Max. tensile load during installation		[N]	4000
Temperature range	Laying and installation	[°C]	-5 to 50
	Operation		-30 to 70
	Transport and storage		-40 to 70
Water penetration (0.1 bar / 24 h)		[m]	≤ 1

Cable type A-DQ(BN)H …	No. of fibers	No. of tubes	No. of stranding elements	Outer Ø [mm]	Weight [kg/km]	Min. bending radius during install. [mm]
1x6 to 4x6	6	1 to 6	6	11.5	135	235
3x12 to 6x12	36	3 to 6	6	11.5	135	235
8x12	96	8	8	13.1	165	265
10x12	120	10	10	14.6	210	295
12x12	144	12	12	16.3	255	330
(4x12)+(12x12)	192	16	16	16.9	255	340
(6x12)+(12x12)	216	18	18	16.9	255	340
(9x12)+(15x12)	288	24	24	19.2	325	385

Delivery length

Standard delivery length 6 km